

without sending all of the primary packet (emphasis added). Applicants submit that these limitations are neither taught nor suggested by the cited references in combination.

In making the rejection, the Examiner relies on Reference 1 to show a high speed, high performance serial bus with flexible support for two way communication that allows up to 16 physical connections between any two devices. However, the Examiner notes that Reference 1 does not teach or suggest aborting the transmission without sending all of the primary packet.

In order to cure this deficiency, the Examiner relies on Mattaway to show a system which uses an INFO ABORT packet to prevent transmission of INFO packets or to stop transmission of any remaining INFO packets. The Examiner then refers back Reference 1 (page 31, 3.6.2.4, paragraph 5) to show that a primary packet is made up of subactions or subpackets. The Examiner concludes that termination of transmission of a group of packets is the same as terminating transmission of a particular primary packet at a particular subaction or subpacket without sending the remaining subactions or subpackets that comprise the primary packet.

Regarding the Examiner's assertion that the cited portion of Reference 1 indicates that primary packets are made of subactions or subpackets, Applicants respectfully disagree. It appears as though the cited portion of Reference 1 addresses different "retry" protocols in case of an unsuccessful transmission attempt, with no discussion of primary packets comprising subactions or subpackets. In fact, Applicants submit that a subaction, according to the 1394 protocol, is a complete link layer operation comprising arbitration, packet transmission, and acknowledgement. Thus, a subaction is a 1394 operation which contains a primary packet and possibly an acknowledge packet, and therefore, a subaction cannot properly be considered to be a subgrouping of a primary packet.

Likewise, Applicants submit that the cited portion of Reference 1 also fails to teach or suggest that a primary packet contains subgroupings known as subpackets, much less subpackets which could be considered to be divisible units which could be used as boundary points for early abortion of the transmission of a primary packet. As discussed above, the cited portion of Reference 1 merely describes different retry protocols in case of unsuccessful packet transmission,

which is a far cry from aborting transmission of the remainder of a primary packet during transmission of the primary packet. In any event, such an analysis seems irrelevant since Applicants' claims are not directed towards transmission termination based on any type of packet subgrouping.

Regarding the Examiner's assertion that, in light of the references, it would have been obvious to terminate a primary packet at a particular subpacket, Applicants submit that one could only arrive at that conclusion after exposure to Applicants' disclosure. As previously discussed, the cited portions of the cited references fail to discuss packet subgroupings of any kind, let alone packet subgroupings as they might relate to termination of a packet transmission procedure.

Focusing now on the language of Applicants' independent Claim 1, Applicants submit that the cited references in combination fail to teach or suggest receiving a NAK while the primary packet is being transmitted in order to abort transmission of the remainder of that primary packet. Rather, the cited references only disclose stopping transmission of remaining whole packets, with no teaching or suggestion that the indication to stop transmission can be sent during transmission of a current primary packet. Thus, the references are deficient in at least these two respects.

This is an important distinction since the cited references in combination can only stop transmission in between entire packets while the invention of Claim 1 advantageously provides for stopping transmission of a primary packet while the primary packet is being transmitted. Thus, Claim 1 provides for an earlier release of the bus for non-futile transmissions by other devices. Any devices constructed according to Reference 1 and Mattaway cannot gain this extra bus time since those devices would only be able to regain bus time after the remainder of the primary packet has been unsuccessfully sent. Applicants submit that the bus time regained by the invention of independent Claim 1 would increase bus efficiency over any devices which followed Reference 1 and Mattaway in combination.

Accordingly, Applicants respectfully request withdrawal of the rejection of independent Claim 1. Claims 2 and 3 are dependent on independent Claim 1 and are not obvious at least for the same reasons.

Independent Claim 4 recites, among other limitations, identifying, while receiving the primary packet, that the node cannot successfully accept the primary packet and sending a NAK to the originator of the primary packet concurrently with receiving the primary packet (emphasis added). As discussed above in reference to independent Claim 1, these limitations are neither taught nor suggested by the cited references in combination. Specifically, the cited portions of the cited references do not disclose (1) identifying that a node cannot accept the packet while the node is receiving the packet, or (2) sending a NAK to the originator of the packet concurrently with receiving the packet. Rather, the cited references in combination only abort transmission as to entire packets with no teaching or suggestion that an indication to stop transmission of a primary packet could be sent concurrently with reception of the packet which is to be aborted. Thus, any systems designed according to Reference 1 and Mattaway cannot advantageously provide for abortion of the transmission of the remainder of a primary packet in order to avoid wasting bus time by sending the remainder of the primary packet. Accordingly, Applicants respectfully request that the rejection of independent Claim 4 be withdrawn.

Among other limitations, independent Claim 5 recites a destination node to generate a NAK if the primary packet cannot be successfully accepted, the NAK generated concurrently with the receipt of the primary packet (emphasis added). As discussed above in reference to independent Claims 1 and 4, the cited references in combination fail to teach or suggest a NAK generated concurrently with the receipt of the primary packet. Thus, the cited references in combination do not teach or suggest all of the limitations of independent Claim 5 and cannot achieve the same advantages. Accordingly, Applicants respectfully request withdrawal of the rejection of independent Claim 5. Claims 6-8 depend from independent Claim 5 and are not obvious at least for the same reasons.

Independent claim 9 recites, among other limitations, a state machine to generate a NAK in response to an inability to successfully accept a primary packet, the NAK generated concurrently with an ongoing arrival of the primary packet (emphasis added). The same reasoning set forth above for Claim 5 applies equally to Claim 9. Thus, Applicants respectfully request withdrawal of

the rejection of independent Claim 9. Claims 10 and 11 depend from Claim 9 and are not obvious at least for the same reasons.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending (1) are in proper form, (2) are neither obvious nor anticipated by the relied upon art of record, and (3) are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

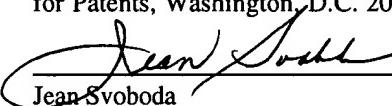
Dated: October 4, 2001


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CERTIFICATE OF MAILING:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Non-Fee Amendment, Assistant Commissioner for Patents, Washington, D.C. 20231, on October 4, 2001.


Jean Svoboda

October 4, 2001